UNITED NATIONS **E**

Economic and Social Council

Distr.
GENERAL

E/1996/70
12 June 1996

ORIGINAL: ENGLISH

Substantive session of 1996
New York, 24 June-26 July 1996
Item 6 (c) of the provisional agenda*

ECONOMIC AND ENVIRONMENTAL QUESTIONS: FOOD AND AGRICULTURAL DEVELOPMENT

Review and analysis of agrarian reform and rural development

Note by the Secretary-General

The Secretary-General has the honour to transmit to the Economic and Social Council, as an annex to the present note, the report on the review and analysis of agrarian reform and rural development. Pursuant to Council decision 1981/185, the secretariat of the Food and Agriculture Organization of the United Nations has prepared the report in collaboration with other concerned organizations and bodies of the United Nations system.

---

* E/1996/100.

96-14768 (E) 260696 030796

/...

Annex

CONFERENCE

Twenty-eighth Session

Rome, 20 October - 2 November 1995

FOURTH PROGRESS REPORT ON WCARRD PROGRAMME OF ACTION

CONTENTS

	Page
EXECUTIVE SUMMARY	4
	Paragraphs
INTRODUCTION	
WCARRD: REPORTING AND MONITORING AND EVALUATION	1-11
Main points	
WCARRD reporting	1-2
Recent changes to the reporting procedure	3
Country questionnaires	4-6
The WCARRD Directory	7
WCARRD Country Profiles	8
WCARRD Database	9-10
WCARRD follow-up country studies	11
SECTION 1	
WCARRD 1990-95 - an overview	12-24
Main points	
Economic and political liberalization and WCARRD goals	12-13
Economic and political liberalization: the problems	14-19
Liberalization and the environment: examining the relationship	20-21
Defence expenditure, conflict and rural poverty	22-23
Reform in Eastern and Central Europe and the former-Soviet Union	24

Paragraphs

SECTION 2
ACCESS TO LAND, NATURAL RESOURCES, INPUTS, MARKETS AND SERVICES 25-42
Main points
Growing reliance on market distribution 25-27
Policy perspectives: small farm advocacy 28
Land: the shift to the market 29-30
Constraints to land market development 31-34
Credit markets 35-36
The need for a supportive institutional framework 37-40
Constraints to market participation 41-42

SECTION 3
PEOPLE'S PARTICIPATION 43-71
Main points
The new participatory imperative 43-47
People's organizations: strengthening their internal capacities 48-59
Increasing awareness of the need for people's participation 60-62
Creating a more favourable policy and legal environment 63-65
Promotion of improved dialogue between governments, development NGOs and rural people's organizations 66-69
Monitoring and evaluation of people's participation 70-71

SECTION 4
WOMEN IN AGRICULTURE AND RURAL DEVELOPMENT 72-88
Main points
Rural women and food security 72-76
Labour and the feminization of agriculture 77-79
Rural women, environment and access to land tenure 80-82
Gender-responsive policy and planning 83
Progress achieved 84-88

SECTION 5
EDUCATION, TRAINING AND EXTENSION 89-98
Main points
The impact of fiscal constraint 89-90
Female education and development 91-93
Agricultural extension and training 94-95
Agricultural extension: new approaches 96-98

EXECUTIVE SUMMARY

This Fourth Progress Report on the WCARRD Programme of Action has been modified extensively in an attempt to overcome its weaknesses and improve its responsiveness. The length has been reduced in order to minimize duplication with other documents available at this Conference.

The Report is divided into five sections:

WCARRD 1990-95 - an overview
Access to land, natural resources, inputs, markets and services
People's participation
Women in agriculture and rural development
Education, training and extension

All sections have been prepared and revised in collaboration with the relevant units.

Five innovations have been introduced in WCARRD in order for it to be more responsive to the needs of Member Governments. It will also be able to provide information and guidance on the necessary steps needed to achieve WCARRD objectives.

Country questionnaires
WCARRD Directory
WCARRD Country Profiles
WCARRD Database
WCARRD Follow-up country studies

The last WCARRD follow-up and reporting period has witnessed a growing consensus among Member Nations on the need for political and economic liberalization. This process, which has the potential to facilitate WCARRD objectives, has been one of the defining characteristics of these last five years. Many Member Nations have realized that liberalization has proven to be a complex and highly problematic process which has not yielded the benefits for the world's rural poor which were anticipated. The experience of many Member Governments has demonstrated that economic and political reform will not succeed without the strengthening of rural institutions and voluntary social organizations which facilitate the active participation of the rural people in development. It must include specific measures to target the needs of the rural poor, "safety nets" should be established in order to prevent the marginalization or complete exclusion of the rural poor from the development process.

The recent phase of liberalization has raised attention to the tension between the short-term productive and economic and the long-term effects on the environment. Environmental issues are, in theory, taken into concern in most developmental objectives and strategies.

With the retreat of governments from the centre stage the trend to rely on the market and the private sector for economic efficiency and equitable distribution of resources, wealth and opportunity in a society has increased over the last five years. There still exist, today, constraints limiting the equal participation of disadvantage groups of the population in the market sector.

Women in recent years have received recognition globally for their contribution in the development process. Nevertheless in many regions policies preventing women from participating still persist. Where policies have favoured the advancement of women inadequate mechanisms have been established to assure that such policies achieve their full potential.

Many Member Nations have witnessed an increase in their enrolment rates in education and an increase in the population active in agriculture. Educational services, such as extension, are dealing with more issues of interest to populations. The need for investing in education is greater now than it has been in recent years; it is still an essential element for human development and the economic growth of a nation. Most Member Nations, due to reform measures, have undertaken cuts in their public expenditure. This has had a negative impact on the quality and availability of extension services and education.

INTRODUCTION
WCARRD: REPORTING AND MONITORING AND EVALUATION

Main points

There is a need for more focused and timely WCARRD Reporting.

- Better data collecting techniques are in place through the development of the new WCARRD questionnaires for Member Nations.
- Proposed closer and continuous working relations with Member Nations on WCARRD Monitoring and Evaluation.

The evolution of the WCARRD Monitoring and Evaluation procedure demonstrates a sustained commitment to the issues and objectives at the centre of the Peasants' Charter. The original Plan of Action embodies a call for flexibility and sensitivity. The current techniques being developed in support of the Fourth WCARRD Follow-up Report and related activities bear testament to the application of these principals. Effective Monitoring and Evaluation requires an ability to respond to changing contexts and environments. The above recent developments in the way FAO has sought to fulfil its WCARRD mandate represent a beginning, they do not constitute an end.

WCARRD reporting

1. WCARRD mandated FAO "and other organizations of the UN system" to "assist in sensitizing the populations of member countries...to the realities of rural poverty, and to the need for global commitments for [the] transfer of resources from the developed countries for the benefit of the rural poor in the developing countries." Furthermore, WCARRD required FAO to "develop indicators of agrarian reform and rural development and help collect and analyse pertinent data in order to monitor progress toward respective national targets of rural development..." and "to "develop improved criteria and methods for monitoring and evaluating rural development and assist governments...in introducing systematic monitoring and evaluating procedures." And, as a necessary corollary to such activities, WCARRD recognized FAO's obligation to "make timely reviews and evaluations of the environmental impact of rural development programmes, projects and technology..." Finally, it was stated that FAO would "undertake periodic reviews with each country in respect of its policies, programmes and resources devoted to the achievement of the objectives outlined in...[the] Programme of Action and of the support provided by these efforts by the relevant international organizations."

"[t]he World Conference on Agrarian Reform and Rural Development...hereby declares that...governments should consider action to...undertake to collect on a regular basis quantitative data...and establish benchmarks...and report changes pertaining to these indicators at every other biennial FAO Conference thereafter."[1]

2. Future Reporting and Monitoring and Evaluation procedures of WCARRD are to be built upon a combination of country reports on the state of progress towards WCARRD goals and objectives, secondary data collected from within and without the UN system and the results of specific FAO-organized case studies undertaken in selected countries and regions. This shift is the

[1] The Declaration of Principles and Programme of Action of the World Conference on Agrarian Reform and Rural Development (The Peasants' Charter), page 9.

result of certain decisions. Firstly, the WCARRD Monitoring and Evaluation procedure is expected to be undertaken in a world that is profoundly different from that of the late 1970s and early 1980s. Secondly, there have been deficiencies associated with previous reporting procedures. Thirdly, there has been a persistently low rate of report submission by countries. Fourthly, the information that was submitted was invariably in a form that made analysis and comparison very difficult. Some countries for example, submitted ten page reports, whilst a few others provided two hundred page documents representing detailed accounts of the progress of agrarian reform within their countries. And still others simply sent a copy of their most recent agriculture census (already available in FAO). As a result, it has not been possible to develop a comprehensive database linked to WCARRD reporting. These then, are the problems that this and subsequent WCARRD Monitoring and Evaluation reporting procedures intend to resolve.

Recent changes to the reporting procedure

3. Attempts were made to identify the causes of the weaknesses that had characterized certain components of previous efforts, and alternative strategies were proposed. As a result, the reporting procedure for the Fourth WCARRD Progress Report has been modified extensively. Five innovations have been introduced:

Country questionnaires
WCARRD Directory
WCARRD Country Profiles
WCARRD Database
WCARRD follow-up country studies

Country questionnaires

4. In spite of the increasing tendency towards "questionnaire overload" it has been concluded that a questionnaire is still more likely to be completed and returned than an open-ended request for reports based on a series of generally-defined indicators.

5. The questionnaire has been divided into five discrete sections:

Access to Land, Water and Other Natural Resources
People's Participation
Education, Training and Extension
Integration of Women in Rural Development
Poverty Alleviation and Equity

Each section has been developed in collaboration with the relevant Services and Divisions in FAO. During the development stage the Country Questionnaires were distributed outside FAO for extensive pre-testing.

6. Considerable attention was paid to developing a clear and accessible format and to providing as much supporting information as possible (i.e. possible data sources/detailed information relating to completing each individual section etc.). The questionnaire focused on three different "types" of information:

quantitative information on trends and patterns
qualitative information on policies and programmes
interpretative information on causes and effects.

The questionnaire was sent to all Member Nations and each section was distributed to the most appropriate institution/individual within the public sector of each country. These targeting procedures elicited both qualitative and quantitative improvements in response levels.

The WCARRD Directory

7. In addition to the quadrennial publication of the WCARRD Follow-up Report, a WCARRD Directory is being developed. It contains key WCARRD-related information on each Member Nation, with an emphasis on accessibility and graphic content. This will fulfil two functions. In the short-term it provides an immediate response to the current absence of an end-user friendly WCARRD database. In the long term, it will provide a valuable stand-alone information tool for the expanded WCARRD information resource inventory. The Directory will combine qualitative and quantitative information on trends and policies and a valuable country/regional/international source of comparative information.

WCARRD Country Profiles

8. In conjunction to the WCARRD Directory, it is proposed that a series of Country Profiles will be developed. This will provide more detailed and more diverse information than the Directory, and will be inherently flexible and upgradable. This will permit the production of detailed reports tailored to the requests of individual users.

WCARRD Database

9. The last 18 months have witnessed the development of a WCARRD Database. It combines data and indicators collected from UN agencies and the WCARRD country questionnaires. The database will be updated and extended constantly, and will incorporate both comparative and country specific information. In addition, it will contain extensive qualitative data, including information on policy and legal reform.

10. The database has been progressing with the return by Member Nations of completed WCARRD country questionnaires. The WCARRD database will eventually be included in WAICENT.[2] The WCARRD database will act as the only centralized information resource on issues relating to rural poverty and development. During the database development phase, two priorities were identified: 1) distributive potential and end-user facility and 2) strong search capacities. There was, it was clear, little use to be derived from a database of this type unless it could be used, with ease, by a wide range of potential users. As a result, emphasis has been placed on "usability" and exploring the different media available for its distribution. It is planned that the database will have been distributed to Member Nations and UN agencies by late-1996 using a suite of media, including electronic transmission and distribution by diskette. It was deemed necessary to develop a database with the capacity to perform complex extraction procedures based on multi-level search criteria. This, it was felt, would assist governments and UN agencies alike, in identifying worthwhile international comparisons and the range of reforms and programmes required in order to enact similar processes locally.

WCARRD follow-up country studies

11. The country questionnaires and the data collected from secondary sources will contain largely national level data and will be inevitably superficial in relation to the analysis of certain issues. As a result, in-depth country studies will be organized at the request of Member Nations following the completion of the Questionnaire. This will provide detailed information on trends and processes, and will supplement the policy/programme-related information that has been collected elsewhere.

---

[2] World Agricultural Information Centre.

The WCARRD Monitoring and Evaluation procedure has been transformed. It is now more responsive to the needs of Member Governments and is able to provide information and guidance on the steps required to move towards WCARRD goals.

For as long as WCARRD goals remain unmet, there is a need for UN agencies such as FAO to strive for innovation and new methods for providing assistance and support to Member Nations. The ongoing innovations in the WCARRD reporting procedure testify to FAO's commitment to its WCARRD Mandate.

TABLE 1

Problem	Problem-solving activities	Action taken
1. Failure of WCARRD to keep up-to-date on relevant issues facing Member Nations	• Redirect WCARRD-related activities • Examine causes of failure	• Reorganization of report-writing • Reorganization of information collection procedures • Reorganization of information presentation
2. Divergence between WCARRD goals and data collected	• Reappraise WCARRD goals • Establish practical means to support these goals	• Development of new WCARRD reporting procedure • Developement of new WCARRD-related activities
3. Low levels of government response to requests for information	• Identify data sources • Examine availability of data	• Increase level of secondary data • Development of detailed questionnaires • Identify sources of data requested
4. Low quality of data	• Identify data sources • Examine availability of data	• Collection of secondary data • Detailed quesionnaires • Identify probable data sources in questionnaires
5. High levels of data duplication	• Review current availability of data in UN system	• Visit institutions • Import relevant data
6. Lack of comparative data	• Identify suitable comparative data • Identify source of data	• Develop country questionnaires • Import secondary data • Develop comparative database
7. Lack of database	• Identify needs and requirements of database • Identify appropriate software and hardware configurations	• Establish database • Develop information presentation formats
8. Low levels of reporting and information development between WCARRD Reports	• Establish on-going WCARRD information distribution capacity	• Development of WCARRD database • Production of country fact sheets

SECTION 1
WCARRD 1990-95 - an overview

Main points

Economic and political liberalization have become the dominant themes in rural development theory and practice.

- Rural poverty has decreased in some regions.
- Patterns of government expenditure reflect continuing distortions.
- Economic restructuring has proved problematic.

The last WCARRD follow-up and reporting period witnessed growing consensus among Member Nations on the need for political and economic liberalization. Governments retreated from centre stage and promoted the market as the main arbiter of economic efficiency and the equitable distribution of resources, wealth and opportunity within society. In theory these reforms are essential for the realization of WCARRD goals.

Realizing reform is neither easy nor complete. The experience of many Member Nations demonstrates that economic and political reforms must include specific measures to target the needs of the rural poor. Without "safety nets", liberalization can lead to either the marginalization or complete exclusion of the rural poor from the benefits of political and economic reform. Furthermore, the experience of the 1990s has heightened the need to augment current understanding of the relationships between civil society and the private sector (in addition to that between civil society and the state).

Recent events demonstrate that the rural poor continue to be denied many of the benefits of change. The causes of exclusion are complex. Continuing global recession, imperfect terms of trade, spatial distortions at the sub-national level and incomplete government commitment or inappropriate international advice, all lead to the continued exclusion and marginalization of the rural poor.

Economic and political liberalization and WCARRD goals

12. An increasing number of Member Nations have accepted that a properly constructed market, rid of distortions and privileges, is the most effective means of distributing rights and wealth within a society. Likewise, Member Nations have recognized that political freedom and participatory democracy represents the only way of incorporating the needs of individuals and groups within the decision-making process. Nonetheless, both economic and political liberalization require profound commitment and deep systemic reform in order to become a meaningful reality.

13. Liberalization has the potential to facilitate WCARRD goals. It can assist the distribution of land, the improvement of educational services, the direct participation of the rural poor in policy formulation and the reduction of gender disparities. It represents therefore, a basic instrument for poverty alleviation and eventual eradication.

Economic and political liberalization: the problems

14. Few countries are forced to operate alone. Instead the period has witnessed increasing levels of international cooperation and support. The IMF and World Bank for example, have continued to develop structural adjustment-type packages that facilitate: a) reduced government intervention; b) financial restructuring; c) fiscal reform; d) targeted infrastructure investment; e) stimulation of the private sector.

These adjustment programmes aim at the restoration of internal and external balances between aggregate demand and available resources through the tightening of domestic financial policies. They also often include currency depreciation to equilibrate the market for foreign exchange. These are essential steps for stabilizing an economy, the resumption of sustainable growth and poverty reduction, and for altering prices as a basis for the movement of resources from the production of non-tradables to tradables.[3]

15. These economic reforms have had impacts on all sectors. Studies suggest, however, that many of the structural adjustment and related economic liberalization initiatives have had a negative impact on the rural poor. Effects depend on production-side factors such as whether the poor are net producers of tradable or non-tradable commodities. Economic and political liberalization often lead to reductions in rural wage and employment levels, increases in product prices, increasing factor costs of production and reduced compensatory public sector welfare expenditure. In the short term however, these changes have led to negative effects on the poor. Despite the intended aim of increasing infrastructure investment, new fiscal constraints force many governments to reduce or abandon such plans altogether. As a result, poor rural producers tend to pay higher production costs and higher consumption costs; at the same time, many governments have opted to reduce supportive land, production and housing initiatives. These trends have been experienced throughout Africa, Asia, Eastern and Central Europe, the Former Soviet Union (FSU) and Latin America.[4]

16. As a response to these short-term problems, the reporting period saw the emergence of a new advocacy for social safety nets to protect the poor from the immediate negative effects of economic and political reform. It recognizes that attention should be directed at the formulation of secondary policy and programme initiatives to enable the (rural) poor to participate actively in the new economic environments and marketplaces. These initiatives range from specific targeted interventions, such as direct support to small farmer production systems (improving marketing channels, improving access to appropriate technology, etc). to policy decisions reflecting the need to ensure human capital development (education and extension, nutrition and health and so forth).

17. An unequivocal solution to the problems of liberalization has not been found during the period under review. The relationship between economic reform, food production, and rural poverty remains shrouded in seemingly contradictory evidence. Efficiency gains in the output of export crops which are needed to meet adjustment goals have led to the inability of some countries through domestic production to be able to satisfy their food needs. Likewise relative and absolute rural poverty levels have risen in many regions. Indeed, recent FAO estimates suggest that even though the total number of people experiencing daily food insecurity will fall from the current global level of 800 million to approximately 650 million by the year 2010, this decline conceals regional

---

[3] World Bank, 1993:4 (in Poverty Reduction Handbook. IBRD: Washington:4).

[4] Further elaborated in the Eighth IAA Report prepared for the Conference (C 95/18).

variations. Much of the decline will reflect increasing food security in the Middle and Far East and Latin America. Unfortunately, predictions are that by 2010 almost 30 percent of the population in sub-Saharan Africa will experience daily hunger. Rural poverty continues to represent the denial of a basic human right and it restricts the capacity of an economy to grow.

> Economic and political liberalization are not ends in themselves. Instead, liberalization is a platform for change. It has the potential to act as a vehicle for poverty alleviation and eventual eradication.

18. Evidence shows that the design of national reform measures must be sensitive to context-specific conditions, constraints and areas of potential growth. Recent experiences in Latin America for example, have demonstrated the rapidity with which foreign capital periodically flees a region and its often uncertain commitment to emerging capital markets. Countries should not rely solely on long-term foreign capital investment to support and finance domestic economic growth. Instead, Member Nations must prioritize the strengthening of local economic capacities and for many countries the principal economic sector is ***agriculture***. Even though urbanization is the predominant settlement trend, it is dynamically tied to rural and agricultural sectors. The majority of the world's poor are rural, and the majority of urban residents live in small rather than large cities.[5] These smaller urban centres tend to have stronger functional and economic links with surrounding rural areas. Likewise, geographically uneven programme implementation can lead to disincentives for rural producers, resulting in migration and/or declining production levels. Far too many countries have eliminated subsidies for rural producers but not those favouring urban consumers. This has led to unequal terms of trade between producers and consumers, and can lead to an increase in rural poverty, lower production and/or unsustainable cultivation practices.

19. Simple but well-targeted initiatives can generate substantial improvements. The elimination of price controls can lead to dramatic increases in production and reduced rural poverty. The Government of Guyana, for example, freed rice prices, resulting in increases of over 300 percent in farm gate prices. This led to an immediate rise in the area under rice cultivation by small farmers. Previously, many small farmers rented out land to medium and large farmers who were able to derive scale economies resulting from artificially lo land rents. Price changes brought small farmers back to the land, increased their incomes and provided incentives for important investments in land and water management systems. Furthermore, with the assistance of international donors and development agencies, the Government of Guyana has initiated a process of profound tenure reform and is attempting to restructure drainage and irrigation management systems. This commitment reflects an awareness of the need to marry macro-economic reforms with necessary agricultural changes and reforms.

> Liberalization is neither straightforward nor easy. It requires profound reform and multi-sectoral interventions. Governments must be aware of the need to provide appropriate support and incentives to the agricultural sector. Without this support the rural population will be unable to reap the benefits of economic and political liberalization, and the deficiencies in the agricultural sector may stifle growth in other sectors.

Liberalization and the environment: examining the relationship

20. The recent phase of liberalization has drawn attention to the tension between short-term productive and economic gains and long-term natural resource management and preservation. Rapid productive gains are often sought through technological development and innovation. All agricultural

---

[5] United Nations World Urbanization Prospects: the 1994 Revision. The recent UN monitoring report (E/CN.9/1995/2) notes that only 6 percent of the urban population lives in mega cities of 8 million or more whereas more than half of the world urban population lives in small cities of less than 500 000 inhabitants (projections show that the proportion will be maintained to 2015).

technologies, however, impact on the resource base. Although the Green Revolution in the 1970s showed that high input systems are capable of substantially higher yields recent experience in South Asia demonstrates that long-term use of these technologies and reliance on high input farming methods can also lead to degradation of the natural resource base. In these areas and where natural resources are already severely degraded, the economic costs of the impacts has proved unacceptably high.

21. In theory, competition favours those producers with comparative advantages and penalizes non-competitive sectors. In the case of agriculture however, the rural poor and small farmers are often unable to "switch" to competitive sectors due to insecure tenure, low levels of investment and other reasons. They are often compelled to continue agricultural practices that are both uncompetitive and environmentally damaging but at the same time allow them to survive. Many policy initiatives fail to recognize the productive and economic potential of these disadvantaged groups, thus continuing the cycle of poverty and land degradation. Greater investment in human capital and information-based technologies such as integrated pest management (IPM) and integrated plant nutrition (IPN) are among the strategies most likely to sustain the natural resource base and benefit the rural poor.

Defence expenditure, conflict and rural poverty

22. High levels of military expenditure and continuing conflicts continue to produce negative impacts on agriculture and the rural poor. The resurgence of ethnic wars and even genocide in parts of Europe and Africa provide a brutal reminder of the effect of conflict.

23. These conflicts are the ones that capture the attention of the international media and political community; others do not. UNDP has estimated that between 1989 and 1992 there were 82 conflicts (only three were international) and the number of civil wars is increasing rather than decreasing. International NGOs continue to remind us that more people are killed and injured by domestic forces than by foreign military intervention. It is important to note that 90 percent of war casualties today are civilians (in contrast to the 90 percent casualties who were military at the beginning of the Twentieth Century - ***Twentieth Century war has become civilianized rather than civilized***). Furthermore, a majority of civilian casualties are rural. Sustaining large military forces is often at the expense of reduced social and agricultural investments, and the supply of food and other vital commodities to domestic markets.

Reform in Eastern and Central Europe and the former-Soviet Union

24. The regions that have provided the clearest indication of the costs and benefits of economic and political reform during the last WCARRD follow-up and reporting period are Eastern and Central Europe and the former-Soviet Union (FSU). In almost all of the FSU, political freedom and economic liberalization have led to substantial declines in output, the reduction of agricultural services and increased rural poverty. The profound changes have prompted reconsideration of conventional notions of rural development. Nonetheless, it appears that many of the costs are short term. Furthermore, the difficult process of political and economic reform throughout the region has generated a new spirit of international cooperation and donor assistance.

SECTION 2
ACCESS TO LAND, NATURAL RESOURCES, INPUTS, MARKETS AND SERVICES

Main points

Member Nations are increasingly relying on the market to determine access to land, natural resources, inputs and services.

- Economic liberalization and accompanying market reforms continue.
- Renewed interest in institutional regularization of land and other transactions.
- Land market reforms are progressing slower than other input/output factor reforms.
- Growth with equity is a goal still unmet.

The trend to rely on the market place and the private sector to gain access to all input and output markets, including land, natural resources, credit and services, has continued during the present reporting period. The transition to market-based institutions through structural adjustment has proved, however, to be much more difficult than originally thought. This has been due to both structural and institutional problems. At the same time, there has been an increasing understanding of the evolving relationship between markets and agrarian systems.

Growing reliance on market distribution

25. The overwhelming trend among Member Nations is that input and output markets are becoming more competitive. This has been the result of a continuation of economic liberalization programmes and general trade agreements such as GATT. These programmes have resulted in extensive dismantling of parastatals, removal of subsidies and elimination of other market distortions.[6] Economic growth has accelerated in many parts of the world as a result of freer trade, privatization of inefficient state enterprises and the move from central planning to market economies. The global picture is that with increased access to input and output markets the per capital income of hundreds of millions of low-income people is rising faster than previously.

26. While the general picture is positive, the benefits of economic liberalization and market reforms have not spread evenly. Small and marginal producers are often more vulnerable to the changes in patterns of subsidy. Prior to economic liberalization programmes governments often directly and indirectly subsidized inputs and production. Although subsidies were frequently captured by the large farm sector, small producers and poor farmers also derived limited benefits. Subsidies enabled the artificial sustainment of non-profitable and/or unsustainable small as well as large farms. Those who were near or below the poverty line before economic transformation are increasingly unable to attain minimum reproductive thresholds in the initial post-reform period. These problems are aptly demonstrated in the experiences of many farmers in Eastern and Central Europe: inputs, services and machinery now reflect world prices, yet they are unable to sell their products at equivalent prices in weak local markets.

27. This is not to say that economic reform is misguided. The economic foundation of agrarian systems based on price subsidies and market distortions was not sustainable. Without major structural change and transformation, the deteriorating condition of most rural residents was irreversible. Rather, it is now realized that a competitive input and output market and a viable

[6] See the Eighth IAA Report prepared for the Conference (C 95/18) for more details.

financial system are necessary for sustainable agricultural growth. Evidence shows however, that reform must not refer simply to a shift from state to market. The successful transmission of the full benefits of economic and political reform to all sectors of rural society requires an integrated strategy of multi-sectoral adjustments and compensatory actions. Changes need to be effective in credit and land markets, supporting land information systems and legislation, and in overall agriculture sector policies and perspectives.

Policy perspectives: small farm advocacy

28. In many Member Nations, the shift towards the market has been accompanied by a parallel shift in favour of small farms and family farming. This reverses a long established search for increased economies of scale through larger and larger farming operations. Since the last WCARRD Progress Report, studies have found that there are few, if any, economies of scale in agriculture that extend beyond family farming. Farming can only be "industrialized" in exceptional circumstances (e.g. plantation crops), and even then it may not be environmentally sustainable.[7] In family farming there are clear economies of scale resulting from lower supervision costs and increased density of family labour inputs. Rationalizing farm operations with available technology in family farming has led to a resurgent interest in land consolidation. Member Nations such as France, the Netherlands, and Turkey report the development of market-based systems to assist farmers in consolidating their farming operations as a principle means of ensuring their survivability and economic growth. This process has been made more economically feasible through recent developments in LIS [land information systems] technology which will be discussed more fully below. Elsewhere, there has been a growing awareness of the need to stimulate and support the small farm sector. Liberalization and an emerging consensus that the most effective land delivery system is the market, has meant that governments have looked increasingly to the market as a means of extending the small farm sector.

Land: the shift to the market

29. The majority of governments have recognized that the market (whether "free" or mediated) is the most effective land distribution mechanism. It is seen as a vehicle for the reduction of unequal patterns of distribution and as a means of reducing fragmentation and inefficient land use. When profound inequities in land ownership exist, for example, Member Nations such as South Africa have adopted market-led solutions as the only way to achieve an equitable participation and distribution in land resources without disruption and collapse of the agricultural sector on the one hand, and social and political collapse on the other. Once again however, experience shows that corresponding participatory and democratic policy interventions and reforms are necessary.

30. Similarly, Member Nations, such as Philippines, who have advanced further in the land reform process than many other countries undergoing similar reforms, have discovered that productive and economic sustainability do not depend solely on access to land. Evidence has shown that relying on full compensation to large land holders and mortgages for land recipients to pay the cost is insufficient, and prone to accentuate distortions and inequalities. Further ancillary reforms are required: economic, social and environmental sustainability require that the new land holders have the capacity to participate fully in all other factor markets. They cannot do this where mortgage payments make other investments impossible. Therefore, land recipients require instruments to support land purchases. In addition, mechanism such as a graduated land tax, will have to be found to create willing sellers among the large land holders.

[7] For example see WB Working Paper 1164.

Constraints to land market development

31. Evidence shows that additional obstacles inhibit further the attempts of many Member Nations to introduce efficient land markets. Three types of constraints are apparent; they can be summarized as: geo-political, socio-cultural and socio-economic.

32. Ethno-regional tensions, geo-political disputes and customary attachments to specific locations may block attempts to implement profound structural and land market reforms. A fully functioning market requires geographical evenness: such constraints act as concrete obstacles to the free-flowing development of markets within national and international territories. It becomes clear then, that the recent wave of ethno-regional conflict and ethnic genocide in both Europe and parts of Africa impose insurmountable barriers to any processes of economic reform. Furthermore, any subsequent land-based reforms can not be implemented until all geographically-based disputes have been resolved fully, thereby ensuring that no barriers restrict the free-flow of ownership and title within national space.

33. Socio-cultural traditions and values can impose similar constraints on the emergence of land markets within a country. Traditional attachments, for example, to historic land tenure arrangements and land distribution mechanisms can conflict with attempts to introduce market-based land tenure systems. The experiences of selected countries in sub-Saharan Africa demonstrate this tension. A clear incompatibility exists between traditional common property resource management systems and conventional land markets. In theory, there are two extreme options available to governments: the complete dismantling of traditional tenure systems and their substitution with market-regulated systems of access and transfer, or the complete preservation of traditional systems in selected areas. Complete substitution ignores the geographical sensitivity and contextual merit of local traditional systems, can lead to the increased marginality of vulnerable groups and can result therefore, in systemic entropy. Likewise, the complete preservation of traditional systems in geographically delimited areas and their protection from potentially transformative external forces does not reflect the reality of these systems. Traditional systems are rarely static and fixed. Instead they are often highly dynamic and flexible systems, apt at responding to changing needs and conditions. Policies that seek to protect them legally against the encroachment of alternative tenure systems can inadvertently suppress their dynamic potential, through imposing a set of rigid rules and conditions. Therefore, policies and tenure reforms have tended to, and should focus at a given point along a continuum that stretches between these two possibilities. The appropriateness of the specific approach selected depends on local conditions, relating to the strength and importance of traditional systems as compared to the potential returns offered by new tenure arrangements and transfer mechanisms. In many cases, a mediated solution has proved most effective, through which the demands and sensitivities of traditional groups and their tenure arrangements are incorporated into a process of reform. A common problem refers to the validity of traditional or customary registration procedures in comparison to formal written registration documents associated with contemporary land cadastre systems. These common disparities complicate arbitration and dispute resolution procedures. Niger for example, has established a progressive framework approach whereby traditional and "modern" registration procedures are given equal legal weighting and validity. Elsewhere, such as in Burkina Faso, governments have sought to empower local institutions in order to ensure that local/traditional land tenure arrangements and land rights are respected and incorporated within the land delivery system and process. This type of arrangement, whereby traditional and non-traditional tenure arrangements and registration procedures are granted equal validity appears the most valid and sustainable solution, for it ensures the non-disruption of traditional systems and the non-violation of traditional rights.

Fiji and India

Fiji, for example, is using modern LIS technologies to ensure that land transactions in the customary land areas that make up the majority of the island are just as viable as those in the private property sector. In this way Fijian holders of customary rights can benefit from modern sustainable investments without endangering their traditional land tenure values.

West Bengal State in India presents another innovative way of applying modern concepts of land tenure cadastre to traditional problems. Here, simple registries have been created to handle, at the Panchayat (village council) level, all the various recognized land access arrangements. This has given increased security to holders of secondary tenures associated with share-cropping and other tenancy arrangements. The field data record increased investment in sustainable practices when both the tenant and the landlord feel that there is protection that the other party cannot arbitrarily change the arrangement without due process.

34. Land markets are frequently distorted by underlying socio-economic conditions. Incomplete market reforms can lead, for example, to the accentuation of existing socio-economic disparities and patterns of unequal ownership. This is seen in the trend towards market segmentation that often occurs when the poor and landless have access to only a limited supply market of small, usually fragmented parcels. In these cases, it is invariably only economically larger and financially more secure interests that are able to participate in the market for larger and better endowed properties. In these cases then, attempts to introduce land markets have led to the emergence of multiple and polarized land markets, with few inter-market transactions. This often leads to inefficiently sized units, idle land and speculation. This is not only a condition that affects economies in transition. Many Member Nations in Latin America are seeking institutional reforms that will eliminate market segmentation.[8]

Macro economic and structural reform have to proceed far enough to ensure that viable input, output and financial markets are functioning. With the above caveats in mind, the development of rural resource markets hold the greatest potential for assisting the rural poor, landless and disenfranchized populations in achieving economic sustainability.

The conclusion to be drawn from careful analysis of sociological as well as economic analysis of land markets is that carefully balanced policy intervention is needed to make them work fairly and effectively. Fortunately the kinds of policy intervention compatible with both political and economic liberalization of the market are rapidly developing. Member Nations have a rising battery of taxation, zoning, local-level and participatory planning policy tools available to use the land market as an effective mechanism to increase access by the poor and the landless. At the same time, these policy tools allow Member Nation governments to pursue policy goals of sustainable economic goals.

Credit markets

35. The requirements surrounding access to credit following economic liberalization frequently exacerbate the plight of the rural poor. The establishment of formal market mechanisms within a rural economy often removes, or reduces, the level of "traditional" credit mechanisms and imposes formalised banking conditions on the credit procedure. As a result, small and poor farmers, especially female headed households, are not in a position to compete for available credit. Several Member Nations report that alternative methods for the provision of inputs for such farmers exist, for instance small farmers joining together into modern service cooperatives.[9]

---

[8] Mesa Redonda Sobre Politicas de Tierras en America Latina, Campinas, Brazil, 12-15 June 1995.

[9] See Section 3 of this report for further details of this process.

36. The last five years have witnessed selected Member Nations, in collaboration with international agencies and donors, directing increasing attention at the design and implementation of minimalist credit programmes. These, it is suggested, offer improved credit opportunities for small farmers, necessitated by the changed economic environment resulting from structural reform and economic liberalization. Although there is no consensus regarding the form and content of minimalist credit programmes, certain common features are emerging. Credit should be provided in the form of small, primarily working capital, loans. Secondly, in order to ensure recoverability of the loan amount (and thus, the sustainability of the credit system), interest rates should be above inflation. Thirdly, loans should be restricted in size, and repeat loans to individuals should be determined by prior repayments. Furthermore, lending should be character-based, rather than based on detailed feasibility studies. Collateral remains a problem for small farmers, particularly those lacking formal land title and registration documents. In these instances, it has been recommended that lending institutions should accept group guarantees as a substitute for individual ones, although this can lead to collective disadvantages resulting from individual market failures. Finally, it is being increasingly recognized that minimalist loan programmes should incorporate parallel technical and management-assistance programmes. These loan packages have been increasing throughout Latin America and South Asia, and have been used to support both farm and off-farm production units. It is clear however, that expansion of both conventional and alternative credit delivery systems is necessary in order to give rural producers an increased market presence in competing for inputs and credit. In addition, some NGOs assist the disadvantage with alternative sources of credit.

The need for a supportive institutional framework

37. Member Nations report that a lack of supporting institutions hampers the development of market efficiencies in achieving a more sustainable and equitable distribution of rural resources. Conveyancing institutions such as the land registry, cadastre, mortgaging, contract registration and so forth are often lacking, or do not respond to local needs. The market cannot hope to function as an effective and efficient distributor of land if there is no way to clearly determine who has the rights to use how much of it, and for which purposes; because land resources are permanent assets, they must also be defined in space. That is, we have to know what is where and where is what. Fortunately, during the reporting period, there has been a rapid learning curve in the area of land regularization. Thailand, Philippines and Indonesia, for example, have demonstrated that improving land records through land registration and cadastre systems lead to greatly improved participation by small farmers in transaction markets and to increased capital investment in sustainable agricultural practices. These countries have also found that where land records are either non-existent or unsatisfactory the resulting insecurity often leads to environmentally damaging farming systems.

38. Indeed, the pressure by Member Nations to have land record systems that are compatible with economic liberalization associated with the market has lead to an on-going reform of cadastre and land registration systems. This reform has been taking place in two policy arenas simultaneously: 1) the design of land cadastre/registration systems that serve the kinds of transactions in which land-holders engage; and 2) the use of capital saving technologies that are becoming increasing cost effective by the day, such as LIS (Land Information Systems), GPS (Geographical Positioning Systems) and computer data storage and retrieval. This reform has resulted in land cadastre/registration systems that have the flexibility to record a continuum of land tenure arrangements from private and individual land rights through to communal land rights, as well as having the ability to accommodate traditional or customary land rights.

39. Brazil and other Latin American countries have been recording greatly improved sustainable land-use practices in those areas where they have used modern LIS concepts and tools to define and protect indigenous rights. The lessons learned in recent years in the design of land regularization institutions such as the cadastre/registries, land law, mortgaging and conveyancing have given Member Nations enhanced capabilities to include indigenous communities in market transactions, while preserving cultural diversity.

40. The ability to provide secure and clear marketable transaction rights in land resources that form a continuum from customary to private right holders is associated with another area of rapid learning during the period under review. This is an understanding of the land tenure arrangements associated with common property resource management (CPRM) and with pooled and shared resources. Conventional wisdom had argued that only through private allocation of rights would people make rational investments in land. The recent research into the management of impacted forests, grassland and fishing grounds has demonstrated that it is not only possible to get more sustainable results from CPRM approaches, but also better economic returns. These findings dove-tail nicely with equally recent advances in LIS discussed above, that make CPRM compatible with economic liberalization.

Constraints to market participation

41. Markets tend to be judged on the basis of their efficiency rather than on equity. Today, there are still basic constraints to the equal participation of poor and disadvantaged populations in markets. The lack of readily available transport in rural areas is still a major problem. Travelling extensive distances also reduces the quality of the goods to be sold at the market. Markets, in many countries, tend to have rules and regulations which have been established by either government or powerful interest groups which inhibit broad participation. Many people, traditionally excluded from national institutions lack education, assets, skills and most of all credit; therefore, they are in no position to compete fairly in an emerging market which determines the distribution of goods and services.

42. There are preconditions which need to be addressed to create a more equitable market environment. These include all of the WCARRD Plan of Action concerns: investment in people, equitable access to assets such as land and credit, adequate infrastructure - including settlements and housing, access to information; removal of barriers preventing the participation of disadvantaged groups, legal enforcement, incentives, protection of consumers and workers.

SECTION 3
PEOPLE'S PARTICIPATION

Main points

Decentralization efforts will not succeed without strengthening rural institutions and voluntary social organizations which facilitate the active participation of rural people in the development and policy-making process.

- Current reforms create new opportunities and new obstacles for people's participation.
- A declining role of the central state implies a need for increasing people's capacities within the private sector and civic society to actively participate in the decision-making process.
- Developing sustainable capacities for participation requires organizational and institutional solutions, including the establishment of self-reliant and independent people's organizations.

Achieving sustainable rural development and environmental protection requires the cooperation of large, sometimes diverse populations, residing within specific ecological areas. Such cooperation can be enhanced through the voluntary action, cooperation and participation of all sectors of the rural population, including women and other vulnerable groups.

Voluntary rural people's organizations, such as community associations, cooperatives, farmers' organizations and informal groups as well as their inter-linked networks, are essential mechanisms for facilitating this cooperation. While these institutions and traditions have played a key role in enabling cooperation in most developed countries, they are noticeably weak in other parts of the world.

Declining public budgets and foreign assistance are forcing governments to explore more cost-effective approaches to reaching rural producers, in particular small farmers, who comprise vast majority of rural people and are the major producers of food.

Full recognition of the inherent advantages of using more participatory self-help organization approaches in mobilizing rural communities for sustainable agriculture and rural development is an essential first step. Many key decision-makers still need to be informed about and convinced of the economic and political benefits that flow from enhanced people's participation in development programmes and projects.

The new participatory imperative

43. Increasing global economic competition, declining foreign aid and state subsidy flows have put new pressures on governments to reduce the level and improve the cost-efficiency of public services. Rural populations of many developing countries have been particularly hard pressed by these trends. This is because they tend to be politically and geographically more isolated and less socially organized than their urban counterparts and are rarely consulted in the formulation of agricultural and rural development policies.

44. Rural populations as a result of these trends have been less able to protect themselves against poorly-conceived agricultural pricing and marketing policies and the negative side-effects of structural adjustment programmes. These latter effects include a drastic cut in rural development and extension services, a rapid disintegration of rural institutions, organizations and physical infrastructures and a sharp decline in marketed food production which has led to increased frustrations in many countries.

45. While most governments continue to promote rural people's participation through traditional organs of local government and through other formal organizations, such as cooperatives, they

frequently do so in a "top-down" fashion. They often utilize the organization as an instrument for achieving certain government-identified objectives rather than providing an enabling environment that would allow it to function freely as a farmer-owned and controlled self-help organization designed to meet farmer-identified needs.

46. Rural people have participated in these government-supported and financed organizations, but the participation has been mostly "passive". They have been identified as receivers of services, provided and financed by the government, rather than "active" as direct contributors to or stake-holders in the cooperative concern. Member ownership stake in these organizations tends to be low as is management accountability and performance.

47. With the liberalization of markets and the rapid decline of government subsidies and support to these organizations many are now encountering difficulties in operating under the new freer market conditions. Those unable to transform themselves into voluntary, member-controlled and -financed people's organizations will undoubtedly fail. Those that do succeed will pave the way for the establishment of new more participatory and self-reliant rural people's organizations.

People's organizations: strengthening their internal capacities

48. Voluntary rural people's organizations are increasingly being seen as indispensable tools for coping with this transition process and for enabling all producers, especially smaller rural producers and workers to obtain better economies-of-scale and bargaining power in the market place and in policy-making arenas. They are also being seen by some as essential social mechanisms for achieving complex sustainable development objectives and ensuring social harmony.

49. Loosely defined, this category of rural organizations refers to the "organs of rural civic society," i.e. to a wide variety of voluntary, membership-based rural people's organizations and supporting networks, which are controlled and primarily financed by members themselves and pursue member-defined ends. The category includes: rural and farmer cooperatives, agricultural labour unions, farmers' and rural women's associations, voluntary community bodies, such as church bodies and social clubs as well as small informal groups.

50. Official statistics do not often reflect the importance of rural people's organizations since they generally refer only to legally-recognized and registered rural people's organizations, such as cooperatives, agricultural labour unions and some farmer producer organizations. Little quantitative data exists on a broad range of other numerous informal rural people's organizations, like community associations, clubs and informal groups, which many assert, play an equally significant role in enabling people's participation at local level.

51. Agricultural cooperatives are the most visible farmer organizations in rural areas. In developed countries and within some sectors of the economy, agricultural cooperatives hold significant market shares. For example, within the dairy sector, cooperatives control more than 70 percent of the market for dairy products in ten countries (Belgium, Denmark, Finland, France, Germany, Ireland, Netherlands, Norway, Sweden and USA). Other sectors, such as grain, poultry, fruits and vegetables, rural electricity and farm input supply are also heavily cooperatized and it is quite common for farmer members to belong to several cooperatives at once.

52. Agricultural cooperative membership in developing countries tends to be much less extensive and overlapping, except in some NICs[10] where cooperative membership was often mandatory. In most LDCs,[11] agricultural cooperative membership is concentrated in high-value, labour-intensive food or export crop sectors, such as diary, fruits/vegetables, grains, coffee, tea, and sugar.

---

[10] Newly independent countries.
[11] Least-developed countries.

TABLE 2
Cooperative market shares in selected developing countries (as % of total marketed production, 1990)

	Wheat	Dairy	Rice	Soya	Sugar	Cotton	Coffee	Fruits/ Vegs
Brazil	84	69	-	46	-	-	21	-
China	-	-	-	-	-	65	-	65
Costa Rica	-	85	-	-	13	-	-	84
India	-	90*	-	-	55	-	-	-
Indonesia	-	-	10	-	-	-	-	-
Kenya	-	54	-	-	6	84	84	-

\- Signifies data not available.
* Processed dairy products only.
Source: COPAC Statistics.

53. Rural workers' organizations (RWOs) are another important form of rural people's organization. This category includes a variety of dues-supported agricultural labour unions and peasant unions, etc. whose members are typically agricultural wage labourers engaged in the export crop sector on large plantations and whose organizations are established to assist them in bargaining for improved working and salary conditions. Yet it is important to note that RWOs frequently provide other important member services as well, including smallholder extension, education and health services. RWOs are generally affiliated at national and higher levels to international apex organizations in order to increase their collective bargaining power. Current RWO membership affiliated to the aforementioned apex organizations is estimated to be in excess of 375 million workers worldwide. Some national RWOs are impressively large and exert considerable influence at national level, such as the Confederation of Agricultural Workers of Brazil (CONTAG) whose membership is estimated at 9 million members.

54. The key constraints to strengthening the internal capacities of agricultural cooperatives in NICs and LDCs are threefold: a) the paternalistic role of the state in the management of agricultural cooperatives in formerly socialist countries still is hindering the transformation of existing cooperatives from state-supported rural enterprises into independent farmer-owned and financed cooperative businesses; b) the existing top-down attitudes towards cooperative management of many existing cooperative managers and government cooperative officials; and c) the weak member capital base and low sense of member ownership stake in agricultural cooperatives.

55. At the country level, considerable progress has been made in reducing the excessive role of government in agricultural cooperatives, particularly in the field of cooperative legal reform as mentioned earlier. Privatization and the deregulation of domestic agricultural markets in which cooperatives operate, has also tended to enforce this trend; nevertheless, as a recent 1994 study of cooperative restructuring in Africa by the International Cooperative Alliance revealed, many farmer cooperatives, long-accustomed to receiving government support and control, are finding it difficult to make that transition. The situation is even more serious in some Eastern European and ex-Socialist countries.

56. Progress in the reorientation and retraining of cooperative managers and government support staff has been slower, yet some improvement can now be seen in countries such as Ethiopia, Kenya, Tanzania, Uganda, Zambia, India, Thailand and Viet Nam.

57. Many agricultural cooperatives in developing and formerly socialist countries are heavily dependent on the state as a supplier of low-cost capital for investment and growth. With the current decline in government subsidies and support these same cooperatives will need to mobilize more member capital to survive and grow. Yet long-accustomed to government support, many will find it difficult to change. To address this capital crisis of agricultural cooperatives in 1992, FAO launched a special research programme aimed at identifying successful strategies for raising capital from internal (member) sources and developing improved guidelines which could be used by cooperative movements and governments alike in promoting more financially-self-reliant and sustainable cooperative growth.

58. The main problems facing RWOs today are financial and related to the gradual decline of plantation-style agriculture and worsening in terms-of-trade and employment between the urban and rural sectors the consequent rapid decline in their dues-paying membership base. RWO leadership's difficulty in adapting to satisfying the service needs of its changing member clientele has often aggravated this crisis. These problems have forced many RWOs to merge with other non-farm labour unions to guarantee their economic survival and to actively cater to serving the needs of their growing independent small farmer memberships. In short, many RWOs are now undergoing an important transformation process and are becoming more like independent small farmer producer associations. RWOs have recently shown considerable initiative in countries like Bolivia, Brazil, Venezuela, Ghana, India and the Philippines in coping with this transition. Internationally, UN agencies like ILO and FAO, in particular, have provided valuable support in strengthening their technical capacities to service their changing membership base.

59. In addition to the above, there is a growing trend towards the introduction of participatory small informal group methods for building more sustainable rural people's organizations (initially outside of formal cooperative structures) especially designed to serve the needs of small farmers and marginal rural producers. Specific progress can be seen since 1990 in countries like Sri Lanka, Thailand and Zambia where government agricultural extension services are now actively encouraging these approaches as elements of their overall extension strategies.

Increasing awareness of the need for people's participation

60. The World Social Summit in Copenhagen in March, 1995 noted the growing awareness among agricultural policy-makers that the trend towards decentralization and "down-sizing" of government development services to the rural sector, will not succeed without a corresponding strengthening and build-up of the organizational and technical capacities of the organs of rural "civic society" to assume these new responsibilities.

61. At the international level, FAO has played a lead role in promoting greater public awareness of the benefits and importance of people's participation through its Plan of Action on People's Participation in Rural Development approved by the FAO Conference in November 1991. The World Bank's new Learning Group on Participation has also recently produced a draft "Source-book on Participation" aimed at introducing more participatory approaches into the design of World Bank-financed development projects. UNCED's Agenda 21 declaration also has emphasized the importance of ensuring the more active participation of all "Major Groups," including farmers, women and other rural producers, working through their organizations, in pursuing sustainable agricultural and rural development objectives

62. While progress in raising awareness on people's participation has been slow in most developing countries, notable progress has been achieved in countries such as Indonesia, India, Sri Lanka, Pakistan, Tanzania and Zambia where governments are currently experimenting with the

introduction of new participatory, small group and community-based approaches to the delivery of agricultural extension, plant protection and credit services to small farmers.[12]

Creating a more favourable policy and legal environment

63. Genuine rural people's participation flourishes only where policy and legal conditions enable it to do so. While most low and middle income governments voice strong public support for democratic principles of government and for public participation in decision-making, the policies and laws of many often do not reflect that position. In some countries, laws still severely limit the right of rural people to organize themselves to pursue their self-help interests or, in other cases, allow them to do so only "under the guidance" of government or party officials. Nonetheless, the trend towards increased economic and political liberalization, has led to increased public pressure to reform outdated policies and laws that limit these participation rights.

64. Declining budgets also now mean that many LDC countries are now actively advocating decentralization programmes aimed at devolving more fiscal and decision-making authority and responsibility to local levels of government, which in turn, provide greater opportunities for promoting participation at those levels. Bolivia, for example, has recently embarked on an ambitious programme to promote more effective participation of rural people at the municipal level and other Latin American countries like Chile, Ecuador, Mexico and Venezuela have embarked on similar schemes. India and Nepal have also recently initiated a programme to revitalize the "Panchayat" system of government to assist in decentralization efforts.

Data availability

Current statistics provided by the Committee on Promotion and Advancement of Cooperatives (COPAC), indicates that more than 1.4 billion persons, in 101 countries, are members of legally-recognized people's organizations, such as urban and rural cooperatives, workers organizations, agricultural producer associations, etc. worldwide and roughly 49 percent of these live in rural areas.

While most observers will point out that these statistics may overstate the total active number of "registered" cooperatives, rural workers and farmer organizations worldwide, they will at the same time stress that the number of members of new and "still unregistered" or informal peoples' organizations may be considerably larger.

The total number of registered agricultural cooperative organizations worldwide in 1994, according to the International Cooperative Alliance, was approximately 370 490 affiliated agricultural cooperative societies in 101 countries reaching almost 185 million farmer members, the vast majority of which were located in Asia. It is worth adding that these figures do not include the more than 55 100 credit unions (cooperative savings and credit societies) in 90 countries, of which more than 50 percent are located in rural areas.

65. The reform of cooperative laws is another area where considerable progress has been made in the past few years. For instance, new cooperative laws or government decrees have been put into effect in Tanzania, Ethiopia, Uganda, Poland, Bulgaria, Hungary and Slovakia. New cooperative legislation is now in-the-process of being discussed and debated in a broad range of countries including: Zambia, Guinea, Rumania, India and Viet Nam. Meanwhile, interest in cooperative legal reform is also beginning to grow in the Russian Republic and China where rural cooperatives play

[12] See, for example, the P4K and Integrated Pest Management Programmes in Indonesia, the Farmer-centred Agriculture Resource Management Programme in Asia and FAO People's Participation Programme in Asia and Africa.

important roles in the delivery of farmer services and marketing of agricultural products. China, with the world's most extensive cooperative system, recently (December, 1994) held its first international workshop to discuss the topic of rural cooperative legal reform.

Promotion of improved dialogue between governments, development NGOs and rural people's organizations

66. One of the most notable trends in recent years has been the explosive growth of donor-supported "development NGOs" in LDCs, which often promote the establishment of rural people's organizations at grassroots level, but are not considered as belonging to that category. United Nations Non-Governmental Liaison Service (UNGLS) records currently list over 1 400 development NGOs (mostly network NGOs) as being registered with UN agencies. Unfortunately, because of the rapid increase in the number of these organizations in recent years, no accurate figures exist on the total number of these NGOs worldwide, though some estimate the number to be now in excess of 500 000. It is currently estimated (1994) that more than 6 000 NGOs exist in Sri Lanka alone! Development NGOs are normally distinguished from rural people's organizations in that they are generally not grassroots clientele member-based and that they draw most of their funding support from outside, non-local sources.

67. Since many rural development NGOs face common problems in accessing donor funds, undertaking large projects and influencing governments, they are increasingly beginning to establish their own support network organizations at national, regional and international levels. While most NGO networks were traditionally based in developed countries, rural development NGOs are increasingly setting up their headquarters in developing countries.

68. With the continuing decline in budgets and donor funding, governments and NGOs are now discovering the mutual benefits of "partnering" and dialoguing on issues of common interest and concern. Rural people's organizations, such as cooperatives and RWOs, who have at different times received support from both government and NGOs, are also entering into the dialogue process. In short, the scope for increased dialogue between these three groups appears to be growing. Notable in this area of promoting increased dialogue between NGOs and government on policy and rural development issues have been ANGOC and PHILDHRRA (Philippine Partnership for Development of Human Resources in Rural Areas) in the Philippines.

69. Rural people's organizations, given their slightly different orientation than development NGOs, are also increasingly seeking closer dialogue with governments on rural development issues through their own national, regional and international apex bodies.

NGO Networks

Rural development NGO networks may be national in scope like MYRADA in India, BRAC in Bangladesh, or FONGS in Senegal, or regional in coverage, such as the Asia NGO Coalition for Agrarian Reform and Rural development (ANGOC), whose formal members include 26 national and regional network NGO organizations and institutions operating in eight Asian countries, CLADES in Latin America and the Caribbean Network for Integrated Rural Development (CNIRD).

Monitoring and evaluation of people's participation

70. Regrettably, some governments still regard the promotion of participatory approaches to rural development as being too costly, not sustainable and/or, in the worst case, even politically destabilizing. While it is true that the initial "sunk costs" of participatory self-help approaches may

be higher than for grant-assisted or heavily-subsidized credit schemes, recent studies have shown that properly-executed participation projects see these costs rapidly declining by the third to fourth year.

71. The sustainability of participatory approaches is a legitimate question. Since 1989, FAO has conducted a series of post-project impact studies of former People's Participation Programme (PPP) Projects in five countries in Africa and Asia to look specifically at this question. While the study results are based on a very small sample of countries, the findings did show in four of the five cases that between 30-60 percent of the self-supporting small group structures established under these projects continued to remain active providing valuable services to their members (at no cost to government) two or more years after termination of FAO support. The implications for reducing the cost of agricultural extension delivery to small farmers in developing countries is clear as the approach appears to have been reasonably successful in establishing a near "zero cost" receiving system for small farmers that can be tapped by government extension, credit, health and education agencies.

SECTION 4
WOMEN IN AGRICULTURE AND RURAL DEVELOPMENT

Main points

- Limited progress demonstrates the positive effects of a gender-sensitive policy for rural development.
- Agriculture and rural poverty are becoming more "feminized" due to economic and political dislocations.
- Equity in access to, and control over, rural resources for women farmers is essential for sustainable agricultural development in most regions.

Worldwide, rural women play a major role in agriculture (including fisheries, forestry and livestock) and rural development and, in many countries, are the mainstay of agricultural sectors and food systems. Yet the most disadvantaged population in the world today is comprised of rural women in developing countries, who have been the last to benefit - or who are negatively affected - by prevailing economic growth and development processes. Gender bias and blindness persist: farmers are still generally perceived as "male" by policy-makers, development planners and agricultural service deliverers.

Rural women and food security

72. Poverty, food insecurity, and environmental degradation are recognized as critical development problems and have been given highest priority on the international development agenda, following the International Conference on Nutrition (ICN, 1992), and United Nations Conference on Environment and Development (UNCED, 1992), and the preliminary Platform for Action for the Fourth World Conference on Women (1995). These issues have a disproportionate negative impact on rural women, due to their inferior socio-economic, legal and political status as well as their critical roles as producers and household managers. The causes and effects of these impacts are systemic, with far-reaching implications for agricultural and rural development as a whole and for all initiatives aimed at raising levels of nutrition, improving production and distribution of food and agricultural products, and enhancing the living conditions of rural populations.

73. Within this context, women's empowerment will be central to achieving initiatives aimed at raising levels of nutrition, improving production and distribution of food and agricultural products, and enhancing the living conditions of rural populations. They have less access to productive resources (e.g. labour, water, land, tree crops, sylvan species, technology, agricultural inputs, credit, markets, extension, training, and even their own labour) than do men. At the same time, women's access to social services (e.g. schooling, health care and information, family planning) has been eroding. And all these constraints are compounded by women's lack of economic, political, and legal power to improve their circumstances.

74. According to a large and growing body of research, direct responsibility for household food provision falls largely on women. Whether reference is made to sub-Saharan Africa or the Caribbean, where women produce 60-80 percent of basic foodstuffs, or to Asia, where they perform over 50 percent of the labour in rice cultivation, or to Southeast Asia and the Pacific or Latin America, where their home gardens represent some of the most complex agricultural systems known,

women have a major responsibility for, and knowledge of, food systems and agriculture. They often provide most of the labour for, and make decisions on, a wide range of post-harvest operations, including storage, handling and marketing, and predominate in off-farm food processing activities either in micro-enterprises or as wage workers in agro-industries.

75. Hunger and malnutrition affect more than 1.3 billion people in the developing world. Most fall into the following categories: children under five years of age, especially girls; women of childbearing age, especially those who are pregnant or breast-feeding; and low-income households, a large percentage of which are female-headed. The 1992 World Declaration on Nutrition proclaimed that "the right of women and adolescent girls to adequate nutrition is crucial." Yet, rural female household members often get less food than males both absolutely and in terms of nutritional requirements. Indeed, it is estimated that over 70 percent of those living in absolute poverty are women.

76. According to recent research findings, there is a direct link between women's access to income and management of household resources and the improvement of household level food security and nutritional well-being of family members. This linkage, along with the importance of increasing women's productivity and hence their contribution to food systems, must constitute a central consideration of policies and programmes aimed at enhancing food security and nutrition.

Labour and the feminization of agriculture

77. In rural areas in developing countries, women spend up to 16 hours a day producing, processing, marketing and preparing food, gathering fuel and water, and performing other household tasks in addition to caring for their children and extended families. However, most rural women are not directly remunerated for their work. A woman may work 60 hours or more a week between domestic, farm and off-farm tasks, and yet receive no wage or cash income of any kind. In fact, women in developing countries work up to one-third more hours than men for an estimated one-tenth the income. Therefore, rural women confront a specific dilemma: they are overemployed in terms of hours worked and underemployed in terms of income received.

78. The economic crisis of the 1980s, structural adjustment programmes, armed conflicts and drought, are believed to have affected women more severely than men, leading to what has been termed by the United Nations as the "feminization of poverty." In particular, male labour force migration, forced migration (i.e. environmental and civil conflict refugees) and the breakdown in traditional family structures have dramatically increased the number of female-headed households, which range from 16 percent of total rural households in the Near East, to 60 percent in certain parts of Africa, and number well over 7 million in Asia and the Pacific. The range within regions is widespread as recent studies in the Near-East Region show; the number of female-headed households ranges from 25 percent in Pakistan to 13 percent in Cyprus to 6.1 percent in Syria.[13] These phenomena have also contributed to the "feminization of agriculture", that is, the increased concentration of agricultural tasks in the hands of rural women.

79. When households must generate additional earnings or confront a decrease in access to services due to economic crisis, structural adjustment programmes or loss of resources, it is generally women who must mobilize their energies to compensate. Policies on poverty, agriculture, land reform, settlement and structural adjustment do not generally consider rural men and women's differential conditions and needs, nor are the differential policy impacts on men and women considered. Rural poverty will only be alleviated if these issues are recognized and fully integrated into policy and programme design, implementation and evaluation.

---

[13] FAO Regional Office for the Near East Country Reports prepared for the Fourth World Conference on Women.

Rural women, environment and access to land tenure

80. Women's roles as environmental managers and as key actors in achieving sustainable development were emphasized in the Nairobi Forward Looking Strategies (NFLS) and further highlighted in the 1991 FAO/Netherlands "Den Bosch" Conference on Agriculture and the Environment and in the UN Conference on Environment and Development, and in the adoption of Agenda 21, notably Chapter 24, "Global Action for Women Towards Sustainable and Equitable Development." Rural women's technical knowledge of sustainable resource use in soil and water conservation and management, pest management, forest use and conservation, and plant and animal genetic resource management needs to be recognized.

TABLE 3
Percentage of ownership of cultivated land by women farmers in four selected countries

Ownership of land	Thailand	Trinidad	Nigeria	Syria
Personally owned	22.50	8.75	4.38	-
Husband's land	38.75	30.00	23.00	41.25
Gift from husband	-	-	30.11	-
Family land	10.00	8.75	11.88	36.25
Government land	-	25.00	-	-
Communal land	-	-	20.00	-
Squatted land	-	8.75	-	-
Rented land	28.75	18.75	10.63	22.50

(Source: Manju Dutta Das, FAO 1995).

81. Many rural women, in many developing countries, lack access to land or have insecure land tenure. It is their husbands, fathers and brothers who hold land title, a practice which essentially eliminates their eligibility for formal sources of credit or membership in farmers' organizations, which could enable them to gain access to inputs that can help stabilize or enhance their production systems. Rural women's access to agricultural extension services worldwide is only about 1/20th of that of men, a point further elaborated in Section 5.

82. It is highly probable that having a large number of children continues to be a major asset and source of immediate and long-term social and economic security for poor rural women, especially in the least-developed countries. This is reflected by the high value placed on child labour in the absence of labour-saving home and farm technologies and of social safety nets. UNCED and ICPD (international Conference on Population and Development) both recognized the importance of the status of women in changing reproductive behaviour and fertility levels, and, ultimately, population growth trends.

Gender-responsive policy and planning

83. A better understanding of the impact of macro-economic policies on rural women is needed. Unfortunately, research on the impact on women of structural adjustment reforms in agricultural and rural development per se has been thin, despite the fact that establishing the linkages mentioned above requires a robust information system. Thus, many analysts, planners, and policy-makers are unaware of the implications for disadvantaged populations of varying policy decisions in agriculture and rural development. Also, there is a dearth of macro-economic policy specialists with social and gender expertise. And relevant data and indicators are lacking - especially as regards the full extent of rural women's productive, farm household, and community roles. Moreover, in developing countries the conceptualization, collection, and analysis of gender-disaggregated data on rural people are inadequate.[14] Women's participation in organizations - including grassroots groups, professional associations, NGOs, and networks - is vital for political advocacy to win equity in development and improve women's social and economic status.

Progress achieved

84. While progress in the advancement of the status of rural women world-wide is difficult to measure due to the lack of reliable data, statistics and indicators, there is evidence, particularly over the last five years, which indicates that progress has occurred, although limited in scope. According to the UNDP report: female life expectancy has increased 20 percent faster than that of males; females have advanced nearly twice as fast in adult literacy and combined school enrolment in the developing world; more than half the women in the developing world now use modern contraceptives and their fertility rate has fallen from 5.4 in 1970-75 to 3.6 in 1990-95.

85. Increased global awareness of the gender implications for development is gradually producing change at all levels, thus eroding gender bias and focusing attention on interrelated processes that contribute to poverty, food insecurity and environmental degradation. Networking and alliance-building among rural women and their advocates in NGOs, government ministries and development agencies have given rise to the creation of national and international fora on the advancement of women, cited above.

86. The introduction of conventions, agreements, new legislation, policies and programmes has been a critical step towards increasing women's access to and control over productive resources. However, most often, rural people remain unaware of women's legal rights or have little legal recourse if rights are violated.

87. New programmes have also sought to promote the participation of women in decision-making at various levels, in part through the creation of national women's organizations and the institutionalization of WID units within technical ministries. This has been an important step in ensuring that women's issues are placed on the national policy agenda. However, due to technical weaknesses, restricted access to financial and human resources, and limited direct participation of intended beneficiaries, the direct impact of many such initiatives on rural women has often been lower than expected.

---

[14] See discussion in Introduction of recent WCARRD data collection activities that address this problem.

SEWA in India

SEWA (Self-Employed Women's Association) is a membership-based trade union of about 50 000 members of self-employed women. All of SEWA's work focuses on how to better the lives of poor women economically, and socially and to make them more self-reliant.

SEWA organized the women of Banaskantha district to be part of the Government of India's DWCRA (Development of Women and Children in Rural Area) programme. This programme's main goal is to bring about change in the quality of life of poor women and their children through increased income. Through the identification of income-generating activities many rural women gained employment; presently 7 000 women are engaged in sustain work and employment.

SEWA so far has organized 42 DWCRA groups under different activities in Radhanpur and Santalpur talukas, and they have been federated into a District-level Association: The "Banaskantha DWCRA Mahila SEWA Association". This association provides assistance in production, marketing, training, credit and other services.

Presently, DWCRA, through the women, is focusing also on changing the perception of government officials that its programmes are no longer welfare but empowerment orientated.

(Source: Nanavaty, SEWA Academy 1994).

88. NGOs and community-based organizations, have often been the first to recognize the critical roles and needs of rural women, and therefore have had a significant impact on the development process and on the agenda of the development community. This success can be attributed in part to their effectiveness in reaching rural women and in giving them a voice in the decision-making process.

Progress on the advancement of the status of rural women has not been systematic enough to reverse the processes leading to the feminization of poverty and agriculture, to food insecurity and to reducing the burden women shoulder from environmental degradation. In fact, the persistence of policies that have adverse impacts on rural women are, in many parts of the world, slowing progress or producing reversals of previous progress related to maternal and child mortality rates, female reproductive health and nutrition, access to productive resources and training, and educational status.

SECTION 5
EDUCATION, TRAINING AND EXTENSION

Main points

Basic education, often referred to as literacy and numeracy education, is an essential component for achieving socio-economic development. Education is not only a universal right, but also a means for improving the knowledge, skills and attitudes of individuals and the development capacity of societies.

- Both formal and non-formal education, for men and women, are closely related to productivity in agriculture.
- It is now widely acknowledged that participatory approaches to extension improve its responsiveness to farmers' problems.

Education lays the foundation for increasing people's abilities to acquire and process information, broadens their perspective and understanding and increases their self-reliance. It also increases the efficiency of training and extension services. Education is a means of reducing poverty by increasing production, efficiency and income, as well as for empowering the disadvantaged groups of a population.

The impact of fiscal constraint

Education pays

A study of education in developing countries showed that farmers completing four years of elementary education had on average 8.7 percent higher productivity.[1] Another study found that one additional year of schooling adds about 2.5 percent to farm output.[2] More recently, analysis shows that in East Asia one additional year of education contributed over 3 percent to real GDP.[3]

1. Jamison and Lau, 1982
2. Chau and Lau, 1987
3. Lau, Jamison and Louat, 1991

89. Most Member Nations report rising enrolment rates in these past five years in both primary and secondary level education. Unfortunately, many countries report reduced expenditure in education due to fiscal deficits. Increasing school enrolments and reduced government expenditure in education, has resulted in a decline in quality and efficiency of the educational system in many Member Nations.

90. Most statistics, however, indicate only enrolment rates, neglecting until recently the number of school leavers. Many children from poor families enrol and shortly after drop-out for either family or economic reasons. Primary among the economic reasons is the high opportunity cost of sending children to school. These opportunity costs weigh heavily in the household decisions regarding labour and food allocation, especially for poor families in rural areas. The World Food Programme has been working successfully with Member Nations on initiatives to keep children in schools. For example, WFP operates School Feeding Programmes in many countries to specifically attract students, reduce drop-out rates and improve the nutritional status of children.

Female education and development

91. There can be little doubt that investing in female education is essential to promote economic growth. Studies show that female education can improve productivity, health, nutrition, natural resource management and family planning. Educated mothers have smaller, healthier families, and tend to have higher incomes and encourage the education of both sons and daughters.[15]

92. Member Nations report that, in general, female enrolment at primary, secondary and university level has increased over the last five years. Women's enrolment in agricultural subjects in the African region has also increased. In Benin, for instance, there has been an 8 percent total increase since 1990. Data reported from Congo showed that in 1984 34 percent of enroled students in specialised agricultural schools and courses were women; this has increased to 53 percent in 1989 (A Synthesis Report: Women in the Africa Region 1995). In the last ten years in Africa, women's enrolment in agricultural studies has increased from 15 percent to 24 percent of the total enrolment.[16] Although some progress in female enrolment in educational programmes has been made, it is still insufficient in comparison to males in many Member Nations. The social development benefits to be derived form female education are still an unrealized potential.

93. Although the research shows that the returns on investing in female education are high (exceeding the return for males in social issues), female under-enrolment persists because of perceived low income returns to girls' schooling and cultural biases. OECD[17] identified the following issues as key elements in promoting the participation of females in education: early childhood care; availability of schools closer to the communities; decentralization and localization of education.

Constraints to female education

Today, there are still factors that inhibit female education in many developing countries:

There is still a lack of awareness on the part of policy-makers, governments, agencies and the population at large regarding the important benefits educating women can achieve.

Lack of adequate schools close to communities increases the reluctance of families to educate daughters.

The cost of education in many countries is unaffordable for many rural families, and as a result they do not send their daughters to school.

Perceived high opportunity costs of sending girls to school, including chore time and daughters and mother's forgone earnings; for poorer families in rural areas the costs are likely to be higher since females tend to make a greater contribution to family welfare.

Lack of role models for young women: especially female teachers and other professionals.

Culture, traditional practices and religion in many cases do not foster the education of women, often constraining them to the home environment.

Agricultural extension and training

94. Throughout the 1980s many governments reduced their public expenditures in extension in spite of the increasing number of people active in agriculture. In Africa spending related to agriculture and extension fell by 50 percent during this period, reducing not only extension coverage but also the quality. Today, two out of three farmers in Africa have no contact with extension services. In Asia the number is three out of four. In Latin American is six out of seven and in the Near East five out of six. In many agricultural systems a considerable, if not the major, portion of

---

[15] OECD Report, 1992.
[16] FAO Directory of Agricultural Education Institutions in Africa, 1995.
[17] OECD Report, 1992.

farm work is done by women, yet there is a low number of female extension officers - women constitute only 12.3 percent of extension workers in Africa. Women farmers report that they are often neglected by extension workers, especially male extension workers. Data from the 1989 FAO Global Consultation on Agricultural Extension showed that in the reporting developing countries 6 percent of extension agent's time and resources are devoted to large commercial farmers; 26 percent to smaller commercial farmers; 24 percent to subsistence farmers; and 6 percent to farm women.

95. The low level of training of a large portion of extension workers is an issue which needs to be addressed in developing countries: there continues to be a shortage of trained manpower in fields related to agriculture despite the progress that has been made in the last three decades. About 39 percent of extension personnel worldwide had only secondary school level qualifications or less; 33 percent were trained at intermediate level; 23 percent at first university degree level; and slightly more than 5 percent had postgraduate qualifications. In developing countries the profile is significantly lower.[18]

Agricultural extension: new approaches

96. During the 1970s extension services were characterized by a top-down technology transfer approach. In the 1980s many developing countries followed the Training and Visit System (T&V) extension approach recommended by the World Bank. More recently, emphasis has been placed on the need for more participatory methods in extension, including farmer participation in the planning and implementation of programmes. Initially introduced on a large scale by donors, NGOs and technical assistance organizations through programmes like the FAO-supported Small Farmer Development Programme (SFDP) and People's Participation Programme during the 1980s and the USAID-FAO supported Integrated Pest Management (IPM) and the IFAD-supported P4K Programme in Indonesia during the early 1990s, these approaches are now spreading rapidly to other countries in Asia and Africa and are beginning to catch the attention of agricultural extension agencies who are looking for more cost-effective ways to reduce extension delivery and farmer training costs.

Various strategies have been designed to improve extension services and lower cost

- Organizing active farmers' groups: in order to ensure effective participation and to accelerate technology dissemination, skills and knowledge;
- Working more with groups for greater efficiency and effectiveness; farmer-to-farmer extension to take advantage of existing local knowledge and the fact that farmers borrow new ideas when they see other farmers using them;
- Strengthening the technical content: content should be validated and tested with farmers and targeted to the appropriate groups;
- Reviewing extension strategies and programmes with farmers' groups: there should a constant update of programmes through feedback from farmers;
- Improving communication: using a mix of media channels to disseminate information to target groups;
- Strengthening extension management: management information systems should be used to monitor performance and improve programmes and;
- Improving pre-service and in-service training for the front-line extension staff.

[18] Report of the Global Consultation on Agricultural Extension, FAO 1989.

97. Extension services in developing countries are often in a weak bargaining position vis-a-vis other pressing national concerns which are often dominated by policies which favour urban consumers. With the move towards structural adjustment policies and the privatization of production enterprises and services, there has been an increasing involvement of the private sector in providing extension services. Privatization of these services is undoubtedly most appropriate where farmers are using technologically advanced technologies and have the money to hire special services to protect their investments. In many developing countries the rural poor, the landless, female head-households and women farmers are likely to lack sufficient capital or credit to pay for private services. This is especially true for those who depend on subsistence agriculture as a means of survival. Yet they are the very population most in need of public financed extension.

98. Extension services are no longer viewed as exclusively providing information in agricultural methods. Target groups are not restricted only to farmers, but cover a larger audience of women and rural youths. In the last decade, increased emphasis has been placed on educating youths on effects of rapid population growth, leadership development, skill training for participation in income-generating activities, HIV/AIDS and environmental protection. Increasingly environmental and sustainable development issues are being incorporated into agricultural education and extension programmes. Sustainable agricultural development demands more complex advice and information from extension services to match the complexity of increased production and environmental protection. The targeting of extension programmes highlights gender issues, the specific needs of the rural poor and the importance of youths as the next generation of farm producers. A rethinking of extension approaches, especially with more emphasis on participatory processes, necessarily has implications for training extension workers. Training in problem-solving and communication is needed as well as a fuller appreciation of farmers' existing knowledge about their environment and farming systems.